What is claimed is:

1. The use of compounds of the formula (1)

where

 $R^1$ ,  $R^2$  are each independently  $C_1$ - to  $C_{22}$ -alkyl,  $C_2$ - to  $C_{22}$ -alkenyl,  $C_6$ - to  $C_{30}$ -aryl or  $C_7$ - to  $C_{30}$ -alkylaryl,

R<sup>3</sup> is C<sub>1</sub>- to C<sub>22</sub>-alkyl, C<sub>2</sub>- to C<sub>22</sub>-alkenyl, C<sub>6</sub>- to C<sub>30</sub>-aryl or C<sub>7</sub>- to C<sub>30</sub>-alkylaryl, -CHR<sup>5</sup>-COO<sup>-</sup> or -O<sup>-</sup>,

R<sup>4</sup> is M, hydrogen or an organic radical which optionally contains heteroatoms and has from 1 to 100 carbon atoms,

A is a  $C_2$ - to  $C_4$ -alkylene group,

B is a C<sub>1</sub>- to C<sub>10</sub>-alkylene group,

D is an organic radical which optionally contains heteroatoms and has from 1 to 600 carbon atoms,

X, Y are each independently O or NR<sup>6</sup>,

 $R^5$ ,  $R^6$  are each independently hydrogen,  $C_1$ - to  $C_{22}$ -alkyl,  $C_2$ - to  $C_{22}$ -alkenyl,  $C_6$ - to  $C_{30}$ -aryl or  $C_7$ - to  $C_{30}$ -alkylaryl, and

M is a cation

n is a number from 1 to 30

as corrosion inhibitors and gas hydrate inhibitors.

- 2. The use as claimed in claim 1, wherein A is an ethylene or propylene group.
- 3. The use as claimed in claim 1 and/or 2, wherein B is a  $C_2$  to  $C_4$ -

alkylene group.

- 4. The use as claimed in one or more of claims 1 to 3, wherein R<sup>1</sup> and R<sup>2</sup> are each independently an alkyl or alkenyl group of from 2 to 14 carbon atoms.
- 5. The use as claimed in one or more of claims 1 to 4, wherein R³ is an alkyl or alkenyl group having from 1 to 12 carbon atoms.
- 6. The use as claimed in one or more of claims 1 to 5, wherein  $R^5$  and  $R^6$  are hydrogen.
- 7. The use as claimed in one or more of claims 1 to 6, wherein n is a number in the range from 1 to 10.
- 8. The use as claimed in one or more of claims 1 to 7, wherein  $R^4$  is a radical of the formula (2)

$$\begin{array}{c|c}
R^{1} \\
\downarrow \\
R^{2} \\
\downarrow \\
R^{3}
\end{array}$$

$$\begin{array}{c}
A - O \xrightarrow{}_{m} B \xrightarrow{}_{*} (2)$$

where R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, A and B are each as defined in claim 1, and m, independently of n, is a number in the range from 0 to 30.

- 9. The use as claimed in one or more of claims 1 to 8, wherein D is a  $C_2$  to  $C_{50}$ -alkylene or  $C_2$  to  $C_{50}$ -alkenylene group.
- 10. The use as claimed in one or more of claims 1 to 8, wherein D is derived from substituted succinic acid derivatives having from 10 to 100 carbon atoms.
- 11. The use as claimed in one or more of claims 1 to 8, wherein D is a

radical of the formula (3)

$$\begin{array}{c|c}
R^{1} & O & O & O \\
R^{2} & N^{+} & A - O \xrightarrow{n} B - X & P^{7} & R^{12}
\end{array}$$
(3)

## where

 $R^7$  and  $R^{12}$  are each either hydrogen or a  $C_2$ - to  $C_{100}$ -alkyl or  $C_2$ - to  $C_{100}$ -alkenyl radical which is obtainable as an oligomer of  $C_2$ - to  $C_8$ -alkenes and may be straight-chain or branched, with the proviso that exactly one of the  $R^7$  and  $R^{12}$  radicals is hydrogen, and  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ , A, B, X, Y and n are each as defined in claim 1.

## 12. A compound of the formula (1)

$$\begin{array}{c|c}
R^{1} & O & O \\
\downarrow & \downarrow \\
R^{2} & A - O \xrightarrow{n} B - X & D & Y - R^{4}
\end{array}$$
(1)

## where

 $R^1$ ,  $R^2$  are each independently  $C_1$ - to  $C_{22}$ -alkyl,  $C_2$ - to  $C_{22}$ -alkenyl,  $C_6$ - to  $C_{30}$ -aryl or  $C_7$ - to  $C_{30}$ -alkylaryl,

R<sup>3</sup> is C<sub>1</sub>- to C<sub>22</sub>-alkyl, C<sub>2</sub>- to C<sub>22</sub>-alkenyl, C<sub>6</sub>- to C<sub>30</sub>-aryl or C<sub>7</sub>- to C<sub>30</sub>-alkylaryl, -CHR<sup>5</sup>-COO<sup>-</sup> or -O-,

R<sup>4</sup> is M, hydrogen or an organic radical which optionally contains heteroatoms and has from 1 to 100 carbon atoms,

A is a  $C_2$ - to  $C_4$ -alkylene group,

B is a  $C_1$ - to  $C_{10}$ -alkylene group,

D is an organic radical which optionally contains heteroatoms and has from 1 to 600 carbon atoms.

X, Y are each independently O or NR<sup>6</sup>,

 $R^5$ ,  $R^6$  are each independently hydrogen,  $C_1$ - to  $C_{22}$ -alkyl,  $C_2$ - to  $C_{22}$ -alkenyl,

 $\mathrm{C_{6^-}}$  to  $\mathrm{C_{30^-}}$  aryl or  $\mathrm{C_{7^-}}$  to  $\mathrm{C_{30^-}}$  alkylaryl, and

- M is a cation
- n is a number from 1 to 30.